WEST DESERT BLM
FUELS MANAGEMENT

Puddle Valley

The Puddle Valley project is designed to improve wildlife habitat and decrease the risk of ex-treme wildland fire behavior by breaking-up fuel continuity and reducing hazardous fuels in the area.

Location: Tooele and Box Elder Counties, Utah
Timeline: 2010-ongoing
Treatment Type: Seeding, aka Greenstripping
Objectives:
1)Utilize a number of different tools to maintain and create greenstrips within the Puddle Val-ley analysis area;
2)Create up to 5,000 acres of new greenstrips along existing roadways, around stands of native vegetation; and
3)Rehabilitate up to 10,000 acres of land currently dominated by cheatgrass and exotic annual forbs.
For More Information:
WDD Fuels Program, 801.977.4300

Puddle Valley is prone to the risk of extreme fire behavior due to excessive fuel loading. Cheat-grass (Bromus tectorum L.) is the dominant species on nearly 20,000 acres in Puddle Valley. Once present, cheatgrass increases fire frequency which incites cyclic environmental degradation by continually eliminating native vegetation. Additionally, the project area is important prong-horn antelope habitat. There is a need to improve wildlife habitat by decreasing wildfire potential, eradicating invasive species, and planting more fire resistant and palatable species.

Description

Cheatgrass is a major factor influencing the frequency, intensity, and scale of fires in Puddle Valley. In an attempt to minimize fire spread, greenstrips have been implemented in past years to break-up fine fuel continuity. Greenstrips are bands or strips of fire resistant vegetation. The plant species used are specifically selected because they hold more moisture throughout the year. Greenstrips reduce the opportunity for fires to start and spread rapidly; they slow-down and re-duce the fires size thus increasing the effectiveness of the firefighting effort. Over-time, cheat-grass has encroached into these previously treated areas decreasing their effectiveness as fuel breaks. To decrease cheatgrass and other exotic annuals and maintain the functionality of the previously implemented rangeland improvement projects, Plateau® herbicide (or the generic equivalent Panoramic; active ingredient imazapic) would be applied at a rate of 4 - 8 oz. per acre. Imazapic is a pre-emergent herbicide and kills cheatgrass seeds as they germinate which provides effective control for up to 2 years. Application would occur during the fall and be applied using aerial and ground based spray methods.

In addition to spraying imazapic on existing fuel breaks, it would also be used to create new greenstrips along roadways, around islands of native vegetation, and to remove cheatgrass from patches (up to 500 acres) in need of revegetation. Areas selected for greenstrips or revegetation would be treated with imazapic at a rate of 4 - 8 oz. per acre prior to seeding. Patches would be seeded with a mix of species

competitive with cheatgrass and that would provide forage for wildlife while greenstrips would consist primarily of Forage Kochia (Kochia prostrata) and other fire resistant species that are competitive with cheatgrass . Imazapic is specific to annual plants like cheatgrass and is not expected to affect the seeded species.

Dead plant material has accumulated in some areas to the point that it could inhibit the effective-ness of the herbicide and seeding treatments. Where dead plant material is excessive it would be removed by either deep disking the material under the soil or by burning prior to spraying with herbicide and seeding. Burning would only be used as means to remove excess biomass in order to increase the effectiveness of the herbicide and/or seed treatments.

Seeding would occur using the most appropriate method for a given soil type and seed size. Seeding methods could include drilling, aerial broadcasting, or aerial broadcasting followed by imprinting. Where broadcasting is appropriate, soils would be scarified to a depth of 1” to 2” using a harrow or disk to prepare the seed bed.

Some roadways within the Grassy Mountains are overgrown with juniper. Creation of fuel breaks along these roadways would minimize fire spread and allow for safer firefighter ingress and egress during a wildfire event. Roadway treatments could include fuel reduction using me-chanical methods (mulching, mowing, chainsaw thinning). Treatments occurring along roadways would not exceed 100 feet on either side of the road.